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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,411	01/22/2001	Taku Ishizawa	Q62798	9456

7590 04/01/2002

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EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 04/01/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/765,411

Applicant(s)
ISHIZAWA ET AL

Examiner
ANH VO

Art Unit
2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 25, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above, claim(s) 24-42 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 17-23 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claims are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. .
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). .
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4, 6, 8 20) ☐ Other:

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DETAILED ACTION

Oath/Declaration

The declaration filed 01 May 2001 is acceptable.

Election /Restriction

1. Applicant's election without traverse of invention I in Paper No. 9 is acknowledged.
2. Claims 24-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to non-elected invention. Election was made **without** traverse in paper No. 9.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTOL 1449 have been considered.

Drawings Object to

The drawings filed 01 May 2001 are objected by Notice of Draftperson's Patent Drawing Review. Correction is required.

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Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 1 is rejected under 35 USC 102 (e) as being anticipated by Barinaga (US Pat. 6,030,074).

Barinaga discloses in Figure 1 an apparatus for delivering pressurized ink to a print head comprising:

- an outer shell member (10, 19) constructed at least by a first outer shell constituent member (10) and a second outer shell constituent member (19) that are hermetically coupled together (Figure 1, column 3, lines 18-19);

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- an ink pack (13) of flexible material storing ink (16) therein, the ink pack being housed within the outer shell (10, 19) (Figure 1);
- a pressure chamber defined between the outer shell member (10, 19) and the ink pack (13) and adapted to receive the pressurized air (73) produced by the air pressurization pump (76) (Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-11 and 17-23 are rejected under 35 USC 103 (a) as being unpatentable over Barinaga (US Pat. 6,030,074) in view of Kobayashi et al. (EP Pat. 0827836A1).

Barinaga discloses in Figure 1 an apparatus for delivering pressurized ink to a print head comprising:

- an outer shell member (10, 19) constructed at least by a first outer shell constituent member (10) and a second outer shell constituent member (19) that are hermetically coupled together (Figure 1, column 3, lines 18-19);
- an ink pack (13) of flexible material storing ink (16) therein, the ink pack being housed within the outer shell (10, 19) (Figure 1);

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- a pressure chamber defined between the outer shell member (10, 19) and the ink pack (13) and adapted to receive the pressurized air (73) produced by the air pressurization pump (76) (Figure 1);
- wherein the first outer shell constituent member (10) and the second outer shell constituent member (19) are hermetically coupled together by vibratory welding and/or ultrasonic welding and/or heat welding and/or heat staking and/or adhesive bonding (column 3, lines 22-24);
- wherein a continuous, substantially planar weld surface is formed over the entirety of a peripheral edge of a lower case forming the first outer shell constituent member (10), and a continuous director is formed on a peripheral edge of an upper case forming the second outer shell constituent member (19) to be fractionally welded upon contact with the weld surface (Figures 1).
- wherein an inherent upright flange section is integrally formed on the peripheral edge of a lower case forming the first outer shell constituent member, along an outer periphery of the weld surface (Figure 1).

However, Barinaga does not disclose an upright flange section is integrally formed on the peripheral edge of a lower case forming the first outer shell constituent member, along an outer periphery of the weld surface; reinforcement ribs are formed on surfaces of the first and second outer shell constituent members of an ink cartridge; and a heat-welding film forming the second outer shell constituent member is thermally welded to the weld surface; a flange section formed along an edge of an opening of the first case; and at least one lug-shaped member which is formed on the second case and engages with the flange section, thereby coupling the first and second cases together.

Kobayahi et al. disclose in Figures 7-9 an ink cartridge comprising:

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- an upright flange section (an unmarked element which is surrounded on a top of an element 14) is integrally formed on the peripheral edge of a lower case forming the first outer shell constituent member (10, 12), along an outer periphery of the weld surface;
- reinforcement ribs (112, 124) are formed on surfaces (11, 12) of the first and second outer shell constituent members (10, 12, 11) of an ink cartridge (1);
- a heat-welding film (150) forming the second outer shell constituent member (11) is thermally welded to the weld surface;
- a flange section (an unmarked element which is surrounded on a top of an element 14) formed along an edge of an opening (14) of the first case (10, 12);
- at least one lug-shaped member (15) which is formed on the second case (11, 15) and engages with the flange section, thereby coupling the first (10, 12) and second cases (11, 15) together.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Kobayashi in the Barinaga ink jet recording apparatus for the purpose of providing ribs on surfaces of an ink cartridge to prevent the damage due to vibration or impact during transport.

Allowable Subject Matter

Claims 12-16 are allowable. These claims would be allowable because none of the prior art references of record discloses an ink cartridge when is removed from a recording apparatus, a pressurized air inlet port is released, to thereby bring the pressure chamber in communication with the atmosphere, and an ink outlet section is brought into a closed state in the combination as claimed.

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CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 5:30 P.M..

The fax number of this Group 2861 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782..

A handwritten signature in black ink, appearing to read 'Anh T.N. Vo', with a long horizontal flourish extending to the right.

ANH T.N. VO
PRIMARY EXAMINER

March 25, 2002